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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,398	10/01/2003	Boaz Ben-Zvi	200308873-1	8875

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EXAMINER	
BATAILLE, PIERRE MICHE	
ART UNIT	**PAPER NUMBER**
2186	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/677,398	BEN-ZVI, BOAZ	
	Examiner	Art Unit	
	Pierre-Michel Bataille	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The instant Office Action is taken in relation to prosecution of the present application, presenting claims 1-12 for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,511,190 (Sharma et al).

With respect to claim 12, Sharma discloses An apparatus, comprising: a non-blocking grouping mechanism that groups entries of data, and returns the groups of entries of data substantially concurrently with processing following entries of data to be grouped ***(database file server with grouping functions and hash functions to coordinate transfer operations while executing group queries, Col. 5, Line 65 to Col. 6, Line 17)***; an overflow mechanism by which data that includes the groups of entries of data that were grouped by the non-blocking grouping mechanism can be written from a primary memory to a secondary memory when the primary memory reaches an overflow condition ***(overflow procedure/function maintaining in a secondary memory set to provide raw data initially processed by group function***

in the course of executing group by query due to lack of room in primary memory; Col. 6, Lines 32-44; Col. 11, Lines 13-20); and a return mechanism by which the data can be returned from the secondary memory back to the primary memory, and whereupon the data is being returned to the user substantially concurrently with the rest of the data being processed by the non-blocking grouping mechanism; a select mechanism by which a prescribed number of output groups are requested by the user, wherein operation of all of the non-blocking grouping mechanism, the overflow mechanism, and the return mechanism are halted when the requested prescribed number of output groups is reached ***(coordinating data transfer from secondary memory to primary memory for SQL group-by query upon determining a query match; Col. 11, Lines 46-55; Col. 12, Lines 15-23)***.

With respect to claim 1, Sharma discloses an apparatus, comprising a non-blocking grouping mechanism that groups entries of data, and returns the groups of entries of data substantially concurrently with processing following grouping of data ***(database file server with grouping functions and hash functions to coordinate transfer operations while executing group queries, Col. 5, Line 65 to Col. 6, Line 17)***.

With respect to claims 5 and 8-9, Sharma discloses receiving input entries of data; filtering out recurring entries of data from the input entries of data ***(input procedure performing grouping operation and generating hashed group value***

serving as index to filter memory resident group in group table; Col. 2, Lines 54 to Col. 3, Line 6); and returning distinct entries of data from the input entries of data to the user substantially concurrently with the receiving input entries of data ***(database file server with grouping functions and hash functions to coordinate transfer operations while executing group queries, Col. 5, Line 65 to Col. 6, Line 17)***.

With respect to claims 2 and 6, Sharma discloses an overflow mechanism by which data that includes the groups of entries of data that were grouped by the non-blocking grouping mechanism can be written from a primary memory to a secondary memory when the primary memory reaches an overflow condition ***(overflow procedure/function maintaining in a secondary memory set to provide raw data initially processed by group function in the course of executing group by query due to lack of room in primary memory; Col. 8, Lines 24-42; Col. 6, Lines 32-44; Col. 11, Lines 13-20)***.

With respect to claim 3 , Sharma discloses an overflow mechanism by which data that includes the groups of entries of data that were grouped by the non-blocking grouping mechanism can be written from a primary memory to a secondary memory when the primary memory reaches an overflow condition ***(overflow procedure/function maintaining in a secondary memory set to provide raw data initially processed by group function in the course of executing group by query due to lack of room in primary memory; Col. 6, Lines 32-44; Col. 11, Lines 13-20);***

and a return mechanism by which the data can be returned from the secondary memory back to the primary memory, and whereupon the data is being returned to the user substantially concurrently with the rest of the data being processed by the non-blocking grouping mechanism ***(coordinating data transfer from secondary memory to primary memory for SQL group-by query upon determining a query match; Col. 11, Lines 46-55; Col. 12, Lines 15-23)***.

With respect to claim 7, Sharma discloses a memory overflow wherein clusters of entries of data are written from a primary memory to a secondary memory when the primary memory runs out of memory ***(overflow procedure/function maintaining in a secondary memory set to provide raw data initially processed by group function in the course of executing group by query due to lack of room in primary memory; Col. 6, Lines 32-44; Col. 11, Lines 13-20)***, and wherein the primary memory overflows into the secondary memory by flushing one of its clusters of entries of data into the secondary memory and releasing certain ones of its in-memory buffers ***(entries emptied from group table 218, Col. 11, Lines 46-55).***

With respect to claim 5, Sharma discloses wherein the primary memory being primary Random Access Memory (RAM) [Col. 5, Lines 9-15; Fig. 1].

with respect to claims 9-11, Sharma discloses grouping entries of data, comprising segmenting the groups into clusters that limit a potential overflow to one

cluster at a time; prior to the potential overflow, all clusters perform work in a non-blocking fashion; and in case of the overflow, transferring clusters one at a time from the primary memory to the secondary memory, while the remaining non- transferred clusters can still function in a non-blocking fashion associated with remaining data ***(Col. 6, Lines 32-44; Col. 8, Lines 24-42; Col. 11, Lines 13-20).***

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2005/0071320 (Chkodrov et al) teaching self-maintaining real-time data aggregations.

US 2003/0131215 (Bellew) teaching lock-up data fields in data processing operations involving multiple tables and relational database.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (8:00A to 4:30P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

February 3, 2006

PIERRE BATAILLE
PRIMARY EXAMINER